WHAT IS CLAIMED IS:

1. A system for receiving a signal comprising:

a receiver operable to receive the signal;

a duty cycle system coupled to the receiver, the duty cycle system operable to turn the receiver off and on at a controllable frequency; and

a signal strength system coupled to the receiver and the duty cycle system, the signal strength system operable to determine the signal strength of the signal received by the receiver, to generate control commands based upon the signal strength, and to transmit the control commands to the duty cycle system.

2. The system of claim 1 wherein the receiver further comprises a plurality of stages, and the duty cycle system is coupled to one or more of the plurality of stages.

3. The system of claim 1 wherein the receiver further comprises a plurality of stages, the duty cycle system is coupled to two or more of the plurality of stages, and the duty cycle system is operable to turn each of the two or more of the plurality of stages off and on at a separately-controllable frequency.

4. The system of claim 1 wherein the receiver further comprises:

a mixer stage operable to change the frequency of the signal;

a band pass stage coupled to the mixer stage, the band pass stage operable to filter the signal;

an automatic gain control stage coupled to the band pass stage, the automatic gain control stage operable to control the gain of amplification of the signal; and

wherein the duty cycle system is coupled to the mixer stage and the automatic gain control stage, the duty cycle system is operable to turn the mixer stage on and off and a first frequency, and to turn the automatic gain control stage on and off at a second frequency.

5. The system of claim 1 wherein the receiver further comprises a mixer stage operable to change the frequency of the signal, and wherein the duty cycle system is coupled to the mixer stage and is operable to turn the mixer stage on and off.

6. The system of claim 1 wherein the receiver further comprises an automatic gain control stage operable to control the gain of amplification of the signal, and wherein the duty cycle system is coupled to the automatic gain control stage and is operable to turn the automatic gain control stage on and off.

7. The system of claim 1 wherein the signal strength system comprises a signal power meter.

8. The system of claim 1 further comprising an interference avoidance system coupled to the duty cycle system and a signal output, wherein the interference avoidance system is operable to determine whether the magnitude of the signal output changes for a corresponding change in the duty cycle.

9. The system of claim 1 further comprising an interference avoidance system coupled to the duty cycle system and a signal output, wherein the interference avoidance system is operable to receive duty cycle data from the duty cycle system and to select a duty cycle based upon the signal output.

10. The system of claim 1 wherein the receiver further comprises:

a mixer stage operable to change the frequency of the signal;

a band pass stage operable to filter the signal; and

wherein the signal strength system is coupled to the mixer stage and the band pass stage.

11. A system for receiving a signal comprising:

a low noise amplifier operable to receive the signal and to amplify the signal;

a mixer coupled to the low noise amplifier, the mixer operable to receive the amplified signal and to shift the frequency of the signal;

a band pass filter coupled to the mixer, the band pass filter operable to receive the frequency-shifted signal and to pass a predetermined band of the signal;

an automatic gain control system coupled to the band pass filter, the automatic gain control system operable to amplify the signal received from the band pass filter to a predetermined amplitude;

a duty cycle system coupled to the mixer, the duty cycle system operable to turn the mixer off and on at a controllable frequency; and

a signal strength system coupled to the mixer, the band pass filter, and the duty cycle system, the signal strength system operable to determine the signal strength of the signal received by the receiver, to generate control commands based upon the signal strength, and to transmit the control commands to the duty cycle system.

12. The system of claim 11 wherein the duty cycle system is coupled to the automatic gain control system and is operable to cycle the automatic gain control system off and on at a controllable frequency.

13. The system of claim 11 wherein the signal strength system comprises a signal power meter.

14. The system of claim 11 further comprising an interference avoidance system coupled to the duty cycle system and a signal output, wherein the interference avoidance system is operable to determine whether the magnitude of the signal output changes for a corresponding change in the duty cycle.

15. A method for processing a signal comprising:

determining whether a received signal includes a noise signal;

allowing noise suppression circuitry to operate if the received signal includes the noise signal; and

turning the noise suppression circuitry off if the received signal does not include the noise signal.

16. The method of claim 15 wherein allowing noise suppression circuitry to operate if the received signal includes the noise signal comprises allowing a mixer and an automatic gain control system of a receiver to remain on continuously.

17. The method of claim 15 wherein determining whether the received signal includes the noise signal comprises:

determining the signal power;

indicating that noise is present if the signal power is greater than a predetermined level; and

indicating that noise is not present if the signal power is less than a predetermined level.

18. The method of claim 15 wherein allowing noise suppression circuitry to operate if the received signal includes the noise signal comprises:

receiving noise presence data; and

setting a duty cycle of a duty cycle system to be continuously on if the noise presence data has a predetermined value.

19. The method of claim 15 wherein turning the noise suppression circuitry off if the received signal does not include the noise signal comprises:

receiving noise presence data;

setting a cycle time of a duty cycle system to a predetermined value; and

setting a duty cycle of the duty cycle system such that the duty cycle system turns off power to one or more components for a predetermined fraction of each duty cycle.

20. The method of claim 15 further comprising adjusting the rate at which the noise suppression circuitry is turned off so as to reduce noise amplification.

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